

**CAPSTONE INDUSTRY COUNCIL MEETING  
MINUTES  
April 12, 2006**

The Alaskan Capstone Industry Council met at the Alaska DOT/PF Building on April 12, 2006, at 8:00 am. An attendance list is attached to the minutes.

The following agenda items were presented:

**0800 - 0915 Information Sharing**

Opening	Sue Gardner
Garmin SW Upgrade	Ray Collins
Avionics Maintenance in SE	Ray Collins
Capstone Coalition Update	Tom George/Dee Hanson
Nav Database Update	Sue Gardner/Paul Fiduccia
WAAS	JoAnn Ford
Capstone Service Status	Mark Olson
ADS-B Off the Glass	Pat Poe/Sue Gardner

**0915-0945 Open Discussion With Special Guest (Rick Day)**

**0945 - 1000 Industry Feedback**

**Information Sharing**

**Opening: Sue Gardner, Capstone and Weather Camera Programs Manager**

Sue Gardner opened the meeting by welcoming Capstone Industry Council members, guests, and visiting FAA delegates from Washington D.C., and Seattle, WA, Mr. Rick Day, Vice President of En Route and Oceanic Services; Mr. Doug Engelke, Acting Service Area Director, Western En Route Service Area; and Mr. John Warner, Manager, Western En Route Service Area.

Sue presented John Warner with a Capstone Aviator Certificate.

**Garmin Software Update**

Ray Collins, Capstone Operational Manager, gave a brief history on the Garmin MX-20 5.7c software upgrade that is being used in Capstone equipped aircraft in

the Y-K Delta. The software upgrade was a result of coordination efforts between Capstone and Garmin in the quest to find a solution to the self-alert, 4096 code disparity seen on the Phase I aircraft. The new software requires a pilot to verify or reset the UAT code during the MX-20 initialization. Additionally, Leonard Kirk, UAA, provided training on the MX-20 5.7c to FAA inspectors, as well as Capstone participants. All Capstone participants have been trained except those out of state, who will be trained by the end of the month.

Pat Poe, FAA Regional Administrator, Alaskan Region, explained that Capstone Phase II operators in SE Alaska would not experience the problem with the code disparity because the aircraft hardware was changed in Phase II to provide a single point of entry.

### **Avionics Maintenance in SE**

AcroHelipro has hired additional personnel to install wiring from the GDL90 to the IDU on approximately 47 affected aircraft. The installations are moving rapidly.

The AcroHelipro contract for installations in SE Alaska expires in June 2006. Sue Gardner offered that Capstone has a Request for Proposal (RFP) in coordination with the agency for maintenance services to continue after the current contract expires. Leonard Kirk, UAA, is under contract to provide maintenance training in April and May in SE Alaska.

Pat Poe explained the need to train technicians and to retain them in the state to support future maintenance needs.

### **Nav Database Update**

Approximately 400 aircraft are equipped and impacted by the Nav Database and updates.

Paul Fiduccia reported that the "Nav Database update issue" was being addressed in a Draft Notice of Proposed Rulemaking (NPRM).

FAA's Draft NPRM will cover Part 135 and 121 operations, and will likely apply to simple front loaded data cards with built-in error checking (in contrast to somewhat complicated data loading systems used on older technology systems), where a failed data load only results in the new data not loading. It also is

limited to nav data, and does not include operating system software. (Paul noted this is another example of Capstone addressing an issue first that will affect the rest of the US later.)

AFS-1 has stated that they would look at issuing an exemption for Alaska or Capstone rather than an association (e.g., Alaska Air Carrier's Association). The best outcome would be a national exemption.

Pilots can expect to hear soon about dates of the NPRM. Depending on the timeline, an exemption may not be needed.

### **Avionics Installations and Installer Training**

Paul Fiduccia relayed that the plan to incorporate recommended shelf fabrication methods and test methods in the installation guide that is incorporated with the AML STC, to avoid FAA AIR or AFS involvement in a specific installation, was received favorably.

The plan to have a course developed for new avionics technicians to train them to do those things necessary to install Capstone III avionics, and to give them an "aircraft maintenance mind set", to help the Alaska avionics shops staff up for Capstone installations, was also received favorably.

### **WAAS Update**

JoAnn Ford, Office of Navigation Services, ATO-W, provided an update and timeline for the status of WAAS improvements.

The four new WRS sites in Alaska are on schedule to go operational in late summer 2006. An earlier slip in the schedule was attributed to movement of the INMARSAT AOR-2 satellite, which stopped moving in March 2006.

JoAnn touched on highlights of the HAI convention in February 2006, noting that feedback from users and tour operators in SE Alaska is favorable for mapped IFR routes.

Paul Fiduccia reported that Garmin indicated helicopters equipped with their WAAS units were getting alerts that the WAAS signal was lost when operating

close to mountainous terrain that blocks the geosynchronous satellites from view, and that some software modification was under development to avoid these alerts.

### **FIS-B Products**

Mark Olson introduced Tim Rardin, Capstone/NISC Project Analyst. Tim distributed a Draft Capstone FIS-B Improvement and Expansion document with an attached list describing current and potential future FIS-B products. Tim explained that Capstone is seeking feedback on the list from users.

Sue Gardner added that a meeting would be scheduled with industry, Flight Service, and the NWS, in the next few weeks.

### **Capstone Services**

Mark Olson explained that when the five GBTs were transitioned from the developmental server and cutover operationally, Operator Fleet Monitoring (OFM) data was no longer available to CRABS users. OFM data would become available through the Volpe Center (ETMS) for commercial providers, e.g., Flight Explorer, when the system was fully operational. That was expected last December. When the five operational GBTs were taken off the glass, the data going to the Flight Explorer was lost. The FAA is working on a near-term solution to re-establish the feed to ETMS/Flight Explorer, and exploring longer-term solutions.

Skip Nelson noted that operators could not use Flight Explorer, and that they had paid a lot of money for it. Flight Explorer costs operators \$5,000 a year.

### **Coalition Activities**

The Capstone Industry Coalition is working on plans for a statewide, three-year program to equip aircraft with Capstone avionics. The group has worked out an approach and is now looking into financing options for an Alaska based program, including grants and loans.

For statewide implementation, plans need to be in place in May 2006, which is when Capstone begins briefings for the August JRC.

FAA statewide infrastructure needs to be in place to support the program. Sue Gardner stated that she was looking forward to the FAA and Coalition standing together and briefing for increased safety across the state.

### **ADS-B Off the Glass**

Pat Poe reported on issues leading up to the removal of ADS-B from the controller display. The current ADS-B authorization allows ADS-B to be used in a non-radar environment only. The FAA determined that ADS-B in Alaska was being used to separate aircraft in a mixed environment, and agreed that applying radar separation standards to ADS-B in the mixed environment was outside of the scope of the authorization. As a result, ADS-B was taken off of the controller display.

As Rick Day explained, there were some unintended consequences to removing ADS-B from the glass, such as the loss of the Bethel Tower/ATC displays and OFMS. Mr. Day stated that he wanted to look at the alternative path for contingencies, and that his goal was to get the GBTs turned on as soon as possible, though he did not have a timeline. An ADS-B Assessment Team was scheduled to be in Anchorage the week of April 17, 2006, to gather information. The forward plan was to determine how to restore services safely. ATO is the service provider, but with oversight by Nick Sabatini, Associate Administrator for Aviation Safety.

Mr. Day also briefed on the status of the National ADS-B Program and current efforts. The National ADS-B Program will be briefing the JRC in June 2006, to move forward with Segment 1 of the national plan. They are also starting to work on Segment 2, which is performance-based NAS. According to Mr. Day, the ATO needs to show a progression of technology and benefits, encouraging equipage, but also satisfying as many interests as possible.

Mr. Day expressed that Capstone has done “an excellent job with industry and moving this technology forward.” He added that Capstone has been directed to consolidate their efforts with the National ADS-S Program, and acknowledged that Capstone was more than just ADS-B.

### **Open Discussion**

### **Industry Feedback**

Tom George commented that, “Capstone has taken a system’s approach. ADS-B is a piece of it, but not all. We’re trying to extend the safety benefits statewide and need this piece in place to move forward.”

Skip Nelson and Dan Perry extended thanks to the FAA delegates for visiting Alaska.

Dan Perry offered that pilots started out in a very unsafe environment and that a lot of the safety that was brought to Alaska was not due to having ADS-B on the glass for ATC. He extended his appreciation for the FAA delegates traveling to Alaska and viewing firsthand what Alaskans are facing all the time.

Ben Jacobsen advised that removing ADS-B from the glass has taken away a layer of safety for the line pilots, and that the FAA "blinded the Bethel Tower." He offered that a resolution needs to be found sooner rather than later.

Lari Belisle stated that it was a big disappointment to the controllers when the system was taken off of the glass, and that everyone needs to have a clear understanding of what is required in order to move forward.

Sue thanked Rick Day for his visit on behalf of Capstone.

### **Conclusion and Next Meeting**

The meeting was concluded following discussions around the table. The next Capstone Industry Council meeting is planned for May 10, 2006, in the conference room at the State DOT/PF Building at Lake Hood.